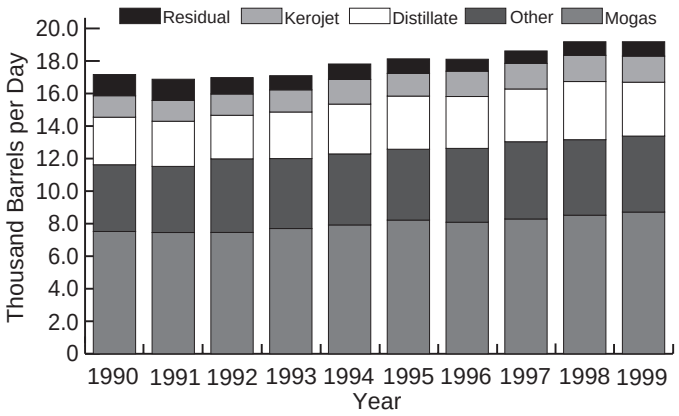
Highlights

The strength of the nations economy continues to push demand for petroleum higher and in June demand reached the highest average for the month yet. Total demand for refined petroleum products, measured as product supplied, in June[1] averaged 19.4 million barrels per day (Table & Figure H1). Demand for refined petroleum products for the first six months of this year is on a near record pace averaging 19.0 million barrels per day , up 1.7 percent compared to the same period last year. With the nations economy continuing to grow at a brisk pace, the Federal Reserve opted to raise interest rates at their June meeting in an effort to head off inflationary pressures.[2] According to data from the National Oceanic and Atmospheric Administration, cooling degree day temperatures across the U.S. in June were, on average, warmer than normal but cooler than this time last year.[3]

Figure H1. Total Demand, 1990-Current, Comparison in June for Petroleum Products



Source: Energy Information Administration, *Petroleum Supply Annual*, DOE/EIA-0340 (various issues), and *Petroleum Supply Monthly*, DOE/EIA-0109 (various issues).

Highlights for June 1999 and the first six months of 1999 include:

- **Demand** for finished motor gasoline set an **all time record high** for the month at an average of 8.8 million barrels per day (Figure H2). Demand has also been at a record pace for the first half of the year, averaging 124 thousand barrels per day more than the prior record. **Imports** of finished motor gasoline averaged 468 thousand barrels per day, short of the June record set in 1994. **Stocks** of finished motor gasoline ended the month 7.0 million barrels below last June for a total of 170.3 million barrels.

- Distillate fuel oil **demand** averaged 3.4 million barrels per day, below last year's averages for the month. **Production** averaged 3.3 million barrels, also behind last June's average. Both demand and production of distillates this year are slightly less than their first six months of 1998 averages. Total **stocks** of distillate fuel oils ended the month at 130.8 million barrels, 5.6 million barrels below last June.

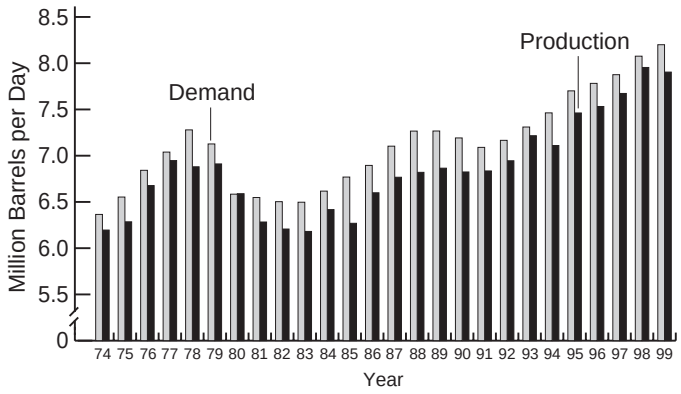
- Residual fuel oil **demand** averaged 887 thousand barrels per day, the highest June average since 1995. **Imports** of residual fuel reached 299 thousand barrels per day, this is a higher average than is normal for June. **Stocks** of residual fuel oil ended the month at a total of 40.7 million barrels.

- **Demand** for kerosene-type jet fuel reached a near record for the month, 1.6 million barrels per day. Demand, at an average of 1.7 million barrels per day since the beginning of the year, is up 3.7 percent compared to last year's record. While **production** during the month was below that of last June, the average over the last six months has set a new record at 1.6 million barrels per day. Kerosene-type jet fuel **stocks** totaled 44.2 million barrels, **a record high for the end June**.

- Stocks of propane ended the month up 4.3 million barrels to end the month totaling 50.5 million barrels.

- Domestic crude oil **production** averaged 5.8 million barrels per day, **the lowest average for June in nearly half a century**. Alaskan field production dropped to **it's lowest level since February 1978**, 965 thousand barrels per day. **Imports** of crude oil averaged 8.7 million barrels per day, only 66 thousand barrels per day below last June's record high for the month. For the year, crude oil imports have averaged 8.7 million barrels, **an increase of 1.5 percent from the prior record**. End-of-month crude oil **stocks** excluding the Strategic Petroleum Reserves (SPR) totaled 330.2 million barrels which are **down 2.1 million barrels compared to last June**.

Figure H2. Finished Motor Gasoline, Year-to-Date June Comparisons, 1974-1999



Source: Energy Information Administration, *Petroleum Supply Annual*, DOE/EIA-0340 (various issues), and *Petroleum Supply Monthly*, DOE/EIA-0109 (various issues).

[1]June 1999 data are monthly-from-weekly estimates based on the Energy Information Administration's Weekly Petroleum Supply Reporting System.
[2]"New Treasury Chief Upbeat About Economy", *Reuters*, July 8, 1999, accessible via the Internet at http://dailynews.yahoo.com/headlines/.
[3]"Cooling Degree Day Data Monthly Summary, Monthly Data for June 1999", *National Oceanic and Atmospheric Administration*, accessible via the Internet at http://www.cpc.ncep.noaa.gov.

Table H1. Petroleum Supply Summary

(Million Barrels per Day, Except Where Noted)

Category	1999			1998	January - June	
	Estimated June	May	Difference[a]	June	1999	1998
Products Supplied	19.4	18.1	1.2	19.2	19.0	18.7
Finished Motor Gasoline	8.8	8.2	0.6	8.5	8.2	8.1
Distillate Fuel Oil	3.4	3.2	0.2	3.6	3.5	3.5
Residual Fuel Oil	0.9	0.9	(s)	0.8	0.9	0.9
Jet Fuel	1.6	1.6	(s)	1.6	1.7	1.6
Other Petroleum Products[b]	4.7	4.3	0.5	4.6	4.8	4.6
Crude Oil Inputs	15.1	14.9	0.1	15.5	14.7	14.8
Operating Utilization Rate (%)	93.7	95.4	-1.7	99.9	93.4	96.6
Imports	10.7	10.9	-0.2	10.9	10.7	10.6
Crude Oil	8.7	8.8	-0.1	8.8	8.7	8.6
Strategic Petroleum Reserve	0.0	0.0	0.0	0.0	0.0	0.0
Other	8.7	8.8	-0.1	8.8	8.7	8.6
Products	2.0	2.1	-0.1	2.1	2.0	2.0
Finished Motor Gasoline	0.5	0.5	(s)	0.3	0.4	0.3
Distillate Fuel Oil	0.2	0.2	(s)	0.2	0.2	0.2
Residual Fuel Oil	0.3	0.3	(s)	0.3	0.2	0.3
Jet Fuel	0.1	0.1	(s)	0.1	0.1	0.1
Other Petroleum Products[c]	0.9	0.9	(s)	1.2	1.0	1.1
Exports	1.0	0.9	(s)	1.0	0.9	1.0
Crude Oil	0.1	0.1	(s)	0.1	0.1	0.1
Products	0.9	0.8	(s)	0.9	0.8	0.9
Total Net Imports	9.8	10.0	-0.2	9.9	9.7	9.5
Stock Change[d]	-0.2	1.5	-1.6	(s)	(s)	0.5
Crude Oil	(s)	0.4	-0.4	-0.6	0.1	0.2
Products	-0.1	1.1	-1.2	0.6	-0.1	0.4
Total Stocks (million barrels)	1,639	1,661	-21	1,651	—	—
Crude Oil	904	915	-11	896	—	—
Strategic Petroleum Reserve[e]	574	574	0	563	—	—
Other	330	341	-11	332	—	—
Products	736	746	-10	755	—	—
Finished Motor Gasoline	170	177	-6	177	—	—
Distillate Fuel Oil	131	135	-4	136	—	—
Residual Fuel Oil	41	41	(s)	40	—	—
Jet Fuel	44	46	-2	44	—	—
Other Petroleum Products[c]	350	348	2	358	—	—

[a] Difference is equal to volume for current month minus volume for previous month.

[b] Includes crude oil product supplied, natural gas liquids, liquefied refinery gases (LRG's), other liquids, and all finished petroleum products except finished motor gasoline, distillate fuel oil, residual fuel oil, and jet fuel.

[c] Includes natural gas liquids, liquefied refinery gases (LRG's), other liquids, and all finished petroleum products except motor gasoline, jet fuel, distillate fuel oil, and residual fuel oil.

[d] A negative number indicates a decrease in stocks and a positive number indicates an increase.

[e] Crude oil stocks in the Strategic Petroleum Reserve include non-U.S. stocks held under foreign or commercial storage agreements.

(s) = Less than 0.05 million barrels per day, or less than 0.05 percent, or less than 0.5 million barrels.

Note: Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration (EIA), 1998, *Petroleum Supply Annual*, Volume II; appropriate issues of the *Petroleum Supply Monthly* and the *Weekly Petroleum Status Report.*

Data for the current month are preliminary estimates, based on weekly submissions. For an explanation of estimation methodology and accuracy, see Appendix A of *Weekly Petroleum Status Report* and the article, "Accuracy of Petroleum Supply Data", published in the October 1998*, Petroleum Supply Monthly.*

Table H2. U.S. Refinery Inputs, Capacities[1] and Utilization Rates: 1998-1999
(Thousand Barrels per Day, Except Where Noted)

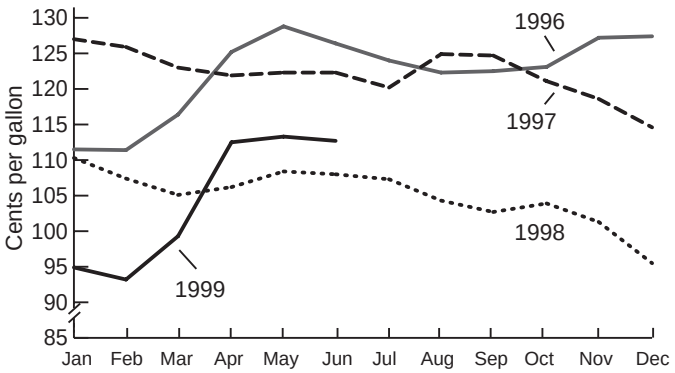
Item	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
1998												
Gross Refinery Inputs	14,661	14,262	14,901	15,301	15,464	15,671	15,705	15,806	15,040	14,222	15,095	15,169
Operating Refinery Capacity[2]	15,538	15,558	15,550	15,547	15,573	15,686	15,691	15,685	15,699	15,343	15,478	15,797
Idle Capacity[3]	173	158	184	144	135	135	135	143	129	537	449	154
Idle Three Months or Less	47	20	46	0	0	0	0	14	0	420	369	37
Idle More than Three Months	127	138	138	144	135	135	135	129	129	117	80	117
Operable Refinery Capacity	15,711	15,716	15,735	15,692	15,708	15,821	15,826	15,828	15,828	15,880	15,927	15,951
Utilization Rate (percent)												
Operating Capacity	94.4	91.7	95.8	98.4	99.3	99.9	100.1	100.8	95.8	92.7	97.5	96.0
Operable Capacity	93.3	90.7	94.7	97.5	98.4	99.1	99.2	99.9	95.0	89.6	94.8	95.1
1999												
Gross Refinery Inputs	14,762	14,719	14,802	15,333	15,253							
Operating Refinery Capacity[2]	15,953	15,955	16,139	16,140	15,984							
Idle Capacity[3]	200	227	131	132	288							
Idle Three Months or Less	71	98	2	0	158							
Idle More than Three Months	129	129	129	132	130							
Operable Refinery Capacity	16,153	16,181	16,270	16,271	16,271							
Utilization Rate (percent)												
Operating Capacity	92.5	92.3	91.7	95.0	95.4							
Operable Capacity	91.4	91.0	91.0	94.2	93.7							

[1]Capacities are on a calendar day basis.
[2]Operating capacity equals the operable capacity less the total idle capacity.
[3] Idle capacity is the component of operable capacity that is not in operation and not under active repair, but is capable of being placed in operation within 30 days; and capacity not in operation but is under active repair that can be completed within 90 days.
Note: Totals may not equal sum of components due to independent rounding.
Sources: Energy Information Administration (EIA), 1998, *Petroleum Supply Annual*, Volume 2, Table 16; EIA, *Petroleum Supply Monthly,* 1999 data issue, Table 28.

Motor Gasoline

The price for conventional motor gasoline during the month dropped slightly from May's average to $1.127 a gallon including taxes (Figure H3).[4] Compared to last June this is a 4.4 percent increase although comparing price during the first half of 1999 to that of last year, prices are actually **3.0 percent below that of 1998's average**. **Demand** for finished motor gasoline increased 3.2 percent compared to last June with an average of 8.8 million barrels per day, **a new all time high**. For the year, demand is also at a record pace, averaging 8.2 million barrels per day. Production of finished motor gasoline for the month and for the first half of the year are trailing last year's comparable averages. **Production** in June averaged 8.2 million barrels per day and year-to-date production has averaged 7.9 million barrels per day. **Imports** of finished motor gasoline were at a healthy average of 468 thousand barrels per day in June. This is **the highest average for finished motor gasoline imports since April 1996**. Since January, imports of finished motor gasoline have been at their highest level for this period since 1990, averaging 388 thousand barrels per day. End-of-month finished motor gasoline **stocks** totaled 170.3 million barrels, down 4.0 million barrels compared to last June.

Figure H3. Retail Prices for Conventional Motor Gasoline, 1996-current



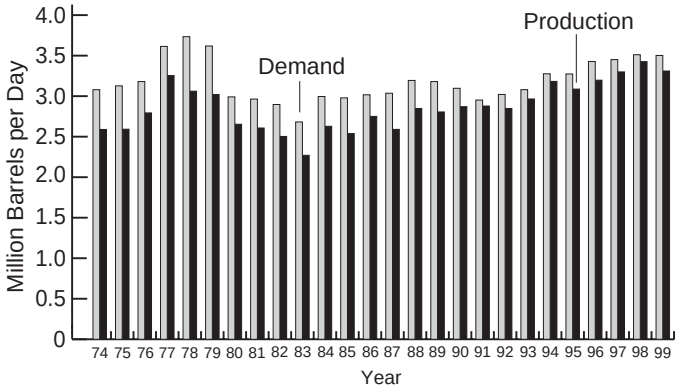
Source: Energy Information Administration, *Weekly Petroleum Status Report,* DOE/EIA-0208 (various issues).

[4]"Table 16. U.S. Retail Motor Gasoline and On-Highway Diesel Fuel Prices, 1998 to Present", *Weekly Petroleum Status Report*, July 2, 1999, p. 27.

Distillate Fuel Oil

Demand for distillate fuel oils, which averaged 3.4 million barrels per day, were down 5.7 percent compared to June last year despite the healthy economy. Year-to-date demand for distillates has also trailed last year's average at 3.5 million barrels per day (Figure H4). Strength in manufacturing translates into increases in transportation demand, as the goods produced need to be delivered to market. Manufacturing activity in June, as reported by the National Association of Purchasing Managers, grew for the fifth straight month suggesting continued strength in the U.S. economy.[5] **Production** of distillate fuel oils averaged 3.3 million barrels per day for the month and year-to-date, both below 1998's comparable averages. While distillate supplies are running behind that of this time last year, they remain at a healthy level leaving margins depressed prompting refineries to limit production this year.[6] Distillate fuel oil **imports** were low for the month at an average of 177 thousand barrels per day. Total distillate fuel oil **stocks** ended the month at 130.8 million barrels, **down 5.6 million barrels from last June**. Low and high-sulfur stocks ended the month nearly balanced at 66.2 million barrels and 64.6 million barrels respectively.

Figure H4. Distillate, Year-to-Date June Comparisons, 1974-1999

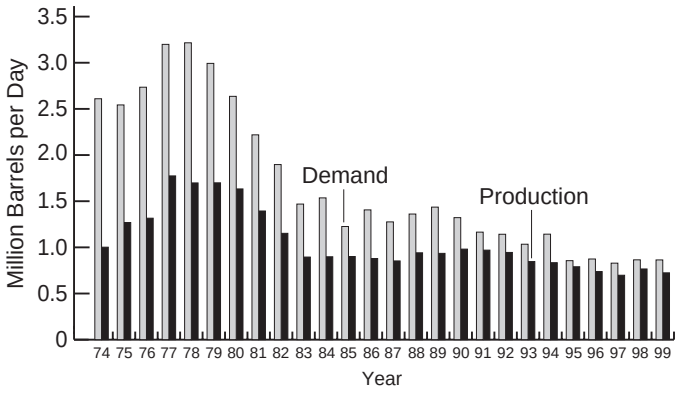


Source: Energy Information Administration, *Petroleum Supply Annual*, DOE/EIA-0340 (various issues), and *Petroleum Supply Monthly*, DOE/EIA-0109 (various issues).

Residual Fuel Oil

Averaging 887 thousand barrels per day, **demand** for residual fuel oil reached the highest average for the month since 1995. Demand for residual fuel oil seems to have leveled off, since the beginning of 1999 demand has averaged 864 thousand barrels per day which is normal when compared with the past few years. Residual fuel **production** was down slightly compared to last year at an average of 737 thousand barrels per day. So far this year, production of residual fuel oil is **down 5.4 percent compared to 1998**, averaging only 724 thousand barrels per day (Figure H5). **Imports** averaged 299 thousand barrels per day for the month and 247 thousand barrels per day over the last six months. Both averages are within their normal seasonal ranges. Residual fuel oil **stocks** ended the month at their highest level for this time of year since 1993, 40.7 million barrels.

Figure H5. Residual, Year-to-Date June Comparisons, 1974-1999

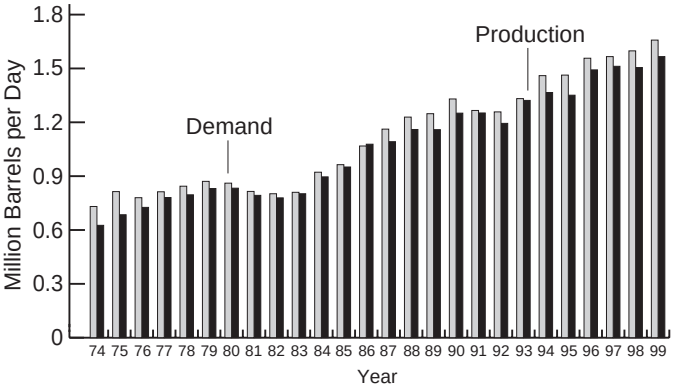


Source: Energy Information Administration, *Petroleum Supply Annual*, DOE/EIA-0340 (various issues), and *Petroleum Supply Monthly*, DOE/EIA-0109 (various issues).

Kerosene-Type Jet Fuel

Demand for kerosene-type jet fuel was about 3 thousand barrels per day from setting a new June record. Kerosene-type jet fuel demand averaged 1.6 million barrels per day during the month. For the year, demand has averaged 1.7 million barrels per day, **up 3.7 percent from the prior record high set last year** (Figure H6). The latest figures on domestic jet fuel consumption from the Air Transport Association reflect a healthy increase in consumption for the year.[7] **Production** of kerosene-type jet fuel was off from the record high for the month, averaging 1.5 million barrels per day. Over the last six months, production of kerosene-type jet fuel did set a **new record for this time period**, averaging 1.6 million barrels per day. **Imports** of total jet fuel, kerosene and naphtha-type, averaged 96 thousand barrels per day which was slightly lower than normal for the month. So far this year, total jet fuel imports are trailing behind 1998's record pace by roughly a thousand barrels per day. This year's year-to-date average for total jet fuel imports is 120 thousand barrels per day. **Stocks** of kerosene-type jet fuel ended the month at **the highest level ever for June**, 44.2 million barrels.

Figure H6. Kerojet, Year-to-Date June Comparisons, 1974-1999



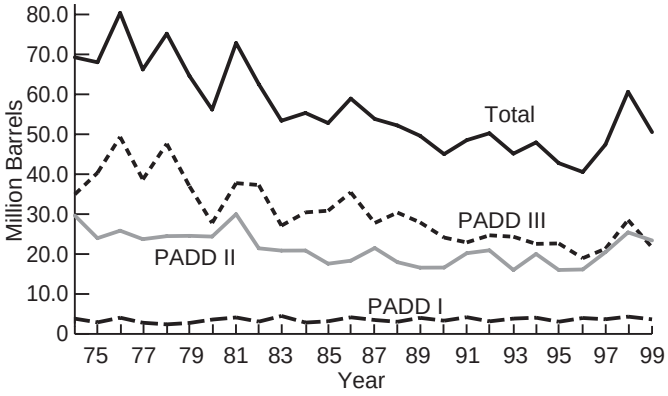
Source: Energy Information Administration, *Petroleum Supply Annual*, DOE/EIA-0340 (various issues), and *Petroleum Supply Monthly*, DOE/EIA-0109 (various issues).

[5]"Manufacturing activity up, NAPM says", *USA Today*, July 1, 1999, accessible via the Internet at http://www.usatoday.com/.
[6]"Crude Oil Approaches $20/bbl on Nigerian News, Refinery Problems", *The Oil Daily*, July 12, 1999, p. 2 & 3.
[7]"Fuel Cost and Consumption", *Air Transport Association*, July 8, 1999, accessible via the Internet at http://www.air-transport.org/.

Propane

U.S. propane inventories ended the month with another modest increase, adding 4.3 million barrels for a total of 50.5 million barrels by month's end. While June's month-end total is 10.1 million barrels below this time last year, it is the second highest June inventory level since 1988 (Figure H7). Regionally, propane stocks increased in all major areas during the month. The Midwest had the largest build for the month, increasing 3.1 million barrels to end the month in the upper range for this time of year. Both Gulf Coast and East Coast ended the month within their normal seasonal ranges. Gulf Coast inventories added 0.4 million barrels to end the month totaling 21.7 million barrels and along the East Coast stocks ended the month up 0.3 million barrels for a total of 3.7 million barrels.

Figure H7. Propane Stocks, Year-to-Year June Comparisons, 1974-1999



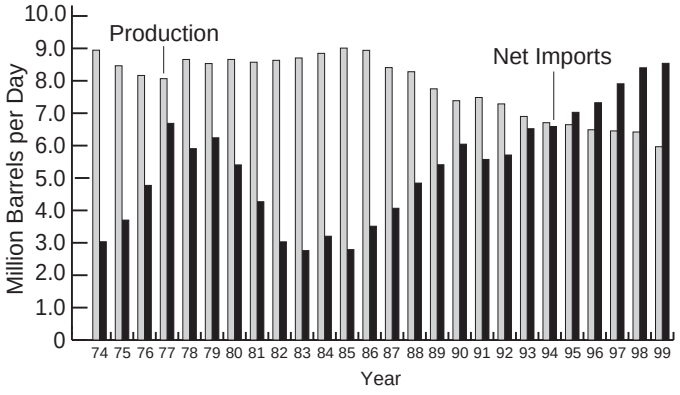
Source: Energy Information Administration, *Petroleum Supply Annual*, DOE/EIA-0340 (various issues), and *Petroleum Supply Monthly*, DOE/EIA-0109 (various issues).

Crude Oil

Domestic crude oil **production** declined to the **lowest average for the month since 1950**, averaging only 5.8 million barrels per day. Alaskan crude oil field production dropped to it's **lowest level since February 1978**. Field production in Alaska of crude oil averaged a mere 965 thousand barrels per day. Several events restricted Alaskan production during June: Tanker scheduling problems due to the Olympic Pipeline shut-in, routine maintenance has two storage tanks at the Valdez marine terminal out of service through September, and planned maintenance at Prudhoe Bay, combined with slightly warmer temperatures had a negative effect on Alaskan crude oil production.[8] For the first six months this year **domestic production is down 7.1 percent** while **Alaskan field production is down 9.5 percent** from 1998 levels. Since January, domestic production has averaged 6.0 million barrels per day (Figure H8) while Alaskan field production has averaged 1.1 million barrels per day, both are their lowest in many years. Despite the continuing crude oil price recovery from the recent slump at the end of 1998 and beginning of this year, domestic production has yet to recover. Producers have remained cautious and abided by their reduced capital spending budgets.[9] With domestic crude oil production down, refineries have been making up by filling their slates with imported supplies. Crude oil **imports** averaged 8.7 million barrels per day for June and have averaged 8.7 million barrels per day since January. Crude imports during the month were in their upper range while **imports for the first half of the year are up 1.5 percent** compared to the prior record for this period. One measure of the U.S.'s reliance on foreign oil is net imports-imports minus exports-which averaged 8.6 million barrels per day, a near record for the month. Year-to-date net imports of crude oil have been at a record pace, averaging 8.5 million barrels per day.

Crude oil **stocks**, excluding the SPR, ended the month at a 2.1 million-barrel deficit compared to this time last year. Excluding the SPR, crude oil stocks ended the month at 330.2 million barrels. Total stocks, including non-U.S. stocks held under foreign or commercial storage agreements, ended the month totaling 903.8 million barrels.

Figure H8. Crude Oil, Year-to-Date June Comparisons for Production and Net Imports, 1974-1999



Source: Energy Information Administration, *Petroleum Supply Annual*, DOE/EIA-0340 (various issues), and *Petroleum Supply Monthly*, DOE/EIA-0109 (various issues).

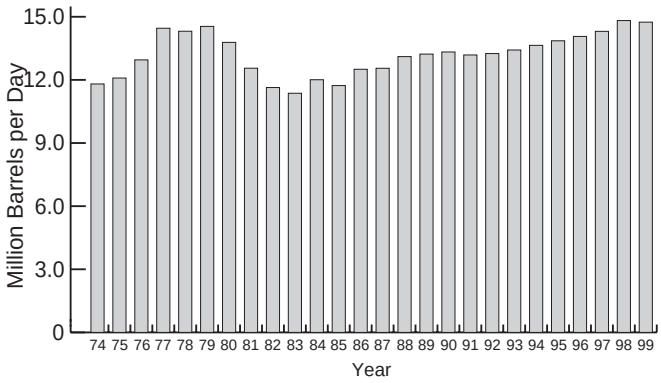
[8]"FY 2000 ANS Production", *Alaska Department of Revenue*, June 1999, accessible via the Internet at http://www.revenue.state.ak.us/oga/production/production.htm #oilproduction.

[9]"Producer Caution Keeps US Output In Rapid Decline", *Petroleum Intelligence Weekly*, June 21, 1999, p. 3.

Refinery Operations

Crude oil **inputs** were down from last year's record high for June to an average of 15.1 million barrels per day. This year's, year-to-date inputs of crude oil have also lagged behind 1998's average. Since January, crude oil inputs have been averaging 14.7 million barrels per day (Figure H9). The estimated refinery **operable utilization rate** (gross input divided by operable capacity) averaged 92.9 percent of capacity compared to 99.1 percent a year ago. Problems along the West Coast at several refineries and with the Olympic pipeline were behind the low utilization rate this month.[10]

Figure H9. Year-to-Date June Comparisons for Crude Oil Inputs, 1974-1999



Source: Energy Information Administration, *Petroleum Supply Annual*, DOE/EIA-0340 (various issues), and *Petroleum Supply Monthly*, DOE/EIA-0109 (various issues).

[10]"Despite Brief Upturn, Refiners Face Slim Margins, Poor Demand", *The Oil Daily*, July 20, 1999, p. 3.